

[Numerous instances of cannibalism in Nature have already been recorded on the pages of the Journal. These includes records of cannibalism amongst insects such as dragonflies and the larva of certain genera of butterflies and moths, cannibalism amongst reptiles and amphibians, amongst predatory birds and finally amongst mammals.

In volume xvii, p. 54 we published a record of a panther being attacked and slain on its 'kill' by a second panther who appropriated the 'kill' and finished by dining on its original possessor. The same writer records a similar experience with a tigress which, under like circumstances, was killed and eaten by a tiger. While two instances are on record of tigers eating their young. 'Dog does not eat Dog' runs the proverb; but in spite of the popular belief it is certain that cases of cannibalism, more or less flagrant are quite common in Nature and, not unnaturally, occur still oftener in captivity. EDS.]

No. IV.—JUNGLE TRAGEDIES

Miscellaneous Note II, in volume xxx, No. 3 of the *Journal* by Mr. R. C. Morris closes with a suggestion for further instances of jungle tragedies.

The photograph I send is an enlargement of one taken by Captain R. H. Haslam and sent to me in 1923. Some coolies employed on a tea estate in Travancore, where he was at the time, brought the tiger in from the forest near by saying they had seen several tigers fighting in an open space and that the party broke up when one tiger lay still.

One can imagine the timorous hesitations before the onlookers ventured to a nearer approach: Capt. Haslam said in his letter that the tiger had obviously been killed by a bite in the head, one canine-tooth having penetrated the brain. In the photograph the tooth hole can be seen in the centre of the skull. The quarrel was no doubt a sexual affair as there was no kill near the place where the incident happened.

QUETTA,
4th August, 1925.

LT.-COL. R. W. BURTON,
Indian Army (Retd.).

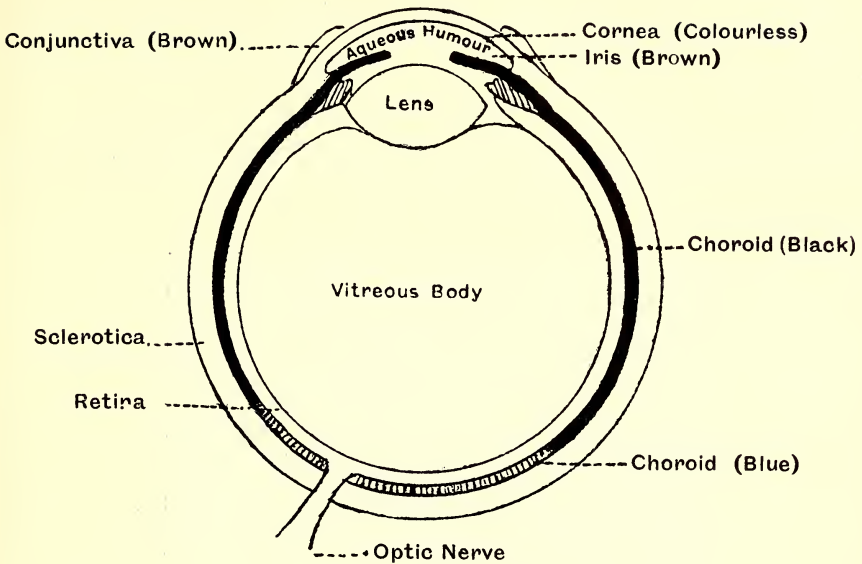
[The photo forwarded to us by Col. Burton shows the mark made by the tiger's tooth in the head of its victim. Unfortunately it is not sufficiently distinct for reproduction. EDS.]

No. V.—ON THE COLOUR OF THE EYE OF THE GAUR OR INDIAN BISON (*BIBOS GAURUS*).

Some comments have recently appeared in your *Journal* on the colouration of the Gaur's eye. I have no gaur's eye here for re-examination but there are in unlimited number of pure bred Aberdeen Angus cattle eyes at my disposal. To all intents and purposes the eyes of the two animals are identical except that in the Angus the brown is darker and the blue deeper and more pronounced. Bearing in mind these two differences the following remarks apply equally to both species. The examination of the eye in the living animal conveys the following impressions:—

The first general impression is that it is a large soft eye of great depth. Detailed examination shows that the general colour of the eye is brown and it is clear that the pigmentation giving rise to this colour is of varying shades and is situated at varying depths in the eye itself. In certain lights and at certain angles the whole eye appears brown. But in most lights and by arrangement so as to produce favourable conditions the transparent unpigmented portion of the eye, called the cornea, transmits a deep blue light. This light is entirely confined to this portion of the eye but it is obvious even without dissection that the pigmentation giving rise to the blue colour is deep seated and somewhere at the back of the eye.

In many individuals, specially in those not bred from the purest stock, the blue varies in luminosity: there are bright patches or spots of blue. The above remarks will be explained in detail by the dissection of the eye, commencing at the visible surface.



Transverse section of the eye of one aberdeen angus bull.

The conjunctiva is brown covering all the portion of the eye which in the human eye, is white. The *Iris* is brown, the pupil is a slit. A cross section behind the cornea admits the removal of the lens with the vitreous body, and the choroid can be examined. The colour of this is very dark brown, it might even be called black, except at one place which will be dealt with latter.

So far nothing blue has been encountered only varying degrees of brown and it will be seen that there are no less than three sources of this colour all situated at varying depths. It is not to be wondered at therefore that the browns seen in the eye of the living animal are elusive. Right at the back of the eye in the region of the optic nerve the choroid is a brilliant iridescent blue or greenish blue. This pigmentation appears to be confined to the surface of the choroid as it can be removed disclosing the underlying dark brown or black. The blue patch is irregular both in shape and colour with spots or patches of lighter and darker blues and greens.

These colours are opposite the pupil and the blue light apparent in the cornea is derived from this source having passed through the vitreous body, the lens, and escaping through the pupil to be diffused by the aqueous humour between the cornea and the iris. Its source also explains the fact that the blue is not apparent at all angles.

It will be seen therefore that the eye is a brown eye and that the blue is reflected light from the back of the eye. The variation in the intensity of the blue accounts for the spots seen in the surface eyes of some animals. It is probable that in the case of the gaur, all of which can be considered to be absolutely pure bred, the eyes of many hundreds would have to be examined before finding any irregularity.

The above diagram explains itself and shows what I found when I examined the Gaur's eye and again more recently in a number of Aberdeen Angus cattles' eyes.

20th August, 1925.

A. A. DUNBAR BRANDER.

[In volume iv of the Society's *Journal* the late Mr. J. D. Inverarity came to the same conclusion as Mr. Dunbar Brander and pointed out that the blue colouring of the Gaur's eye is due to the *tapetum lucidum*—the lining to a greater or less extent of the back part of the choroid membrane of the eye